



OnTime

for Microsoft

Upgrade Manual

OnTime® for Microsoft version 5.4.x

Upgrading from version 1.1.x and newer

Revision 1

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OnTime® for Microsoft

Upgrade Manual

The main audience for this manual is Microsoft administrators with proper experience in Windows Server and Exchange on-premise / Office 365 administration. We expect that the reader of this manual is no stranger to the Microsoft environment.

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Upgrade OnTime for Microsoft

SSL considerations

If your current OnTime server is configured for SSL, a certificate is required for your Tomcat server. This is a change compared to the OnTime versions from before version 3.7.

Note: Self signed OnTime server certificates are not supported.

The process of generating certificate files for the Tomcat server is described in the section [SSL certificates for the OnTime Tomcat Server](#).

Before OnTime version 3.7 there was a component, the 'OnTimeMS URL Forwarder' service. This service has been omitted in OnTime version 3.7.

Note: If you use authentication the method 'HTTP(S) Domain (SSO)', it relies on the 'OnTimeMS Auth' service.

Note: If you have configured a reverse proxy server for external access, please review the current version of 'Installation & Configuration Guide OnTime® for Microsoft'.

The authentication method 'HTTP(S) Domain (SSO)' is not supported through a reverse proxy server.

ADFS considerations

If your OnTime Authentication method is ADFS, please review the setup in the current version of 'Installation & Configuration Guide OnTime® for Microsoft'. The OnTime backend software was changed from OnTime ver. 4.1.7 onwards.

Now the ADFS authentication is handled by port 443 and not port 9443.

The Windows service 'OnTimeMS ACS' is now obsolete.

Catering considerations

If you have 'Catering Manager', please check all 'Menu Items' with serving, as serving has been split into rooms and locations.

Flyway database tool

An OnTime tool called 'otdbupdate.cmd' is used to install and update databases. This tool is powered by the 'open source' tool 'Flyway'.

Tomcat server

In the OnTime for Microsoft version 4.3 the Tomcat server is version 9

Upgrade process

Upgrade of OnTime from earlier versions preserves users and admin settings. The upgrade is possible from the versions OnTime MS 1.1.x and newer.

The main tasks necessary to do to upgrade an OnTime for MS installation from a previous release:

Upgrade the OnTime Windows services and 'Apache Tomcat for OnTime'

Upgrade the OnTime database; this upgrade process is dependent on your installation of the SQL server, quick or custom upgrade.

The 'quick upgrade' is with an SQL Server installed on the same server as the rest of the OnTime application. An additional prerequisite is that the 'Database Name' and 'Username' fields are blank in the 'OnTime Admin Center's Database section'.

The 'custom upgrade' is with more details where the SQL Server is installed differently, or even external to the OnTime server.

Please check your current OnTime version – and make a note of it:

In the OnTime client Web Desktop – Settings/About



Alternatively, in the Admin client - Settings/About



Quick upgrade

Prerequisite:

This process requires that the 'MS SQL Server' is installed locally, on the same server as the rest of OnTime and the database name and username fields are blank (integrated Security=true;)

At the OnTime server - extract the new OnTimeMS-x.x.zip file to a temporary location, where x.x is the new version.

Move the OnTimeMS.x.x folder to 'C:\Program Files\IntraVision\' - the recommended path. The 'x's reflects the current version release.

File Explorer path: > This PC > Local Disk (C:) > Program Files > IntraVision > OnTimeMS-x.x >

Name	Date modified	Type	Size
admintoken	04-04-2022 16:28	File folder	
catering	04-04-2022 16:28	File folder	
cmd	04-04-2022 16:28	File folder	
jdk	04-04-2022 16:28	File folder	
ontime.ms.acs	04-04-2022 16:28	File folder	
ontime.ms.auth	04-04-2022 16:28	File folder	
otdbupdate	04-04-2022 16:28	File folder	
outlook-add-in	04-04-2022 16:28	File folder	
outlook-poll-add-in	04-04-2022 16:28	File folder	
pollarity	04-04-2022 16:28	File folder	
programdata	04-04-2022 16:28	File folder	
scripts	04-04-2022 16:28	File folder	
sqlserver	04-04-2022 16:28	File folder	
teams	04-04-2022 16:28	File folder	
teams_rail	04-04-2022 16:28	File folder	
tomcat	04-04-2022 16:29	File folder	
upgrade	04-04-2022 16:29	File folder	
visitor	04-04-2022 16:29	File folder	
command.cmd	04-04-2022 12:12	Windows Comma...	1 KB
install.cmd	04-04-2022 12:12	Windows Comma...	1 KB
installation.log	04-04-2022 12:51	Text Document	158 KB
Office365TomcatRestart.zip	04-04-2022 12:12	Compressed (zipp...	12 KB
start-catering.cmd	04-04-2022 12:13	Windows Comma...	1 KB
start-pollarity.cmd	04-04-2022 12:13	Windows Comma...	1 KB
start-visitor.cmd	04-04-2022 12:13	Windows Comma...	1 KB
stop-catering.cmd	04-04-2022 12:13	Windows Comma...	1 KB
stop-pollarity.cmd	04-04-2022 12:13	Windows Comma...	1 KB
stop-visitor.cmd	04-04-2022 12:13	Windows Comma...	1 KB
uninstall.cmd	04-04-2022 12:13	Windows Comma...	1 KB

In the File Explorer – change the path to the '**old! – version**' of OnTime, jump to the folder:

C:\Program Files\IntraVision\OnTimeMS-y.y

Run the command '**uninstall.cmd**' as administrator. You will be prompted for 'Press any key to continue . . .' several times.

Jump to the new version's upgrade folder:















C:\Program Files\IntraVision\OnTimeMS-x.x\upgrade\

According to your noted version of MS OnTime

- Right-click on a file that matches your current version and run it as administrator.

If your version is 2.0.2 or 2.0.3, choose 2.0.1+.cmd

If your version is 2.8.0 or later, choose 2.8.0+.cmd

C:\Program Files\IntraVision\OnTimeMS-x.x\upgrade				
Name	Date modified	Type	Size	
 from-1.1.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-1.2.0.4.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-1.2.2.0.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-1.3+.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-1.5+.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-2.0.0.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-2.0.1+.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-2.5.0.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-2.5.0a+.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-2.6.0.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-2.6.2+.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-2.7.0+.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 from-2.8.0+.cmd	21-12-2020 09:36	Windows Comma...	1 KB	
 upgrade-from-2.8.0+.log	21-12-2020 10:24	Text Document	48 KB	

Running this upgrade command will do the following:

- Ask the question of password change for the admin
- Ask the question of where to backup your current OnTime database
- Create tables if necessary
- Transfer the data from your current version if necessary
- Enable Integrated Security for the database
- Install OnTime Auth Service and start it
- Make a backup of your current database, press 'y' to accept the backuppath
- Install the Tomcat service, and start it
- Upgrade the database if necessary
- Create a database for Pollarity if necessary
- Upgrade the Pollarity database if necessary
- Ask the question "Do you want to enable Pollarity? Y/N".
- If you choose 'y' the Pollarity files will be copied to the Tomcat server

Note: Pollarity has an optional licence.

- Create a database for Catering
- Ask the question “Do you want to enable Catering? y/n”
- If you choose ‘y’ Catering files are copied to the Tomcat server for OnTime.
Note: Catering has an optional licence.

A log file ‘upgrade-from-x.x.log’ is created from the upgrade.

In a browser open the OnTime Admin Center.

<http://ontime.example.com:8080/ontimegcms/admin>

Note: Please insert your relevant URL instead of 'ontime.example.com'.

In "OnTime Admin Center" click "Dashboard" to check the OnTime application.

Click "Global Settings/Backend"

Check under section "Authentication" that the right method is selected.

If Custom=http(s)://+ is present, then select the proper method from the drop-down menu.

If you are upgrading from before version 2.8, click 'Start' at the five Scheduled Synchronizations in 'Dashboard'.

In case of issue: 'Database is not running'. Review **Database Setup**

You are now ready to test the use of OnTime – jump to **Final test.**

Custom upgrade

This process is for an MS SQL Server installation that is different from the prerequisites mentioned in the section, **Quick upgrade**, where the SQL server is situated externally to the OnTime server.

It is recommended to take a backup of your OnTime database before the upgrade.

At the OnTime server - extract the new OnTimeMS-x.x.zip file to a temporary location, where x.x is the new version.

Move the OnTimeMS.x.x folder to 'C:\Program Files\IntraVision\' - the recommended path. The 'x's reflects the current version release.

📁 > This PC > Local Disk (C:) > Program Files > IntraVision > OnTimeMS-x.x >

Name	Date modified	Type	Size
📁 admintoken	04-04-2022 16:28	File folder	
📁 catering	04-04-2022 16:28	File folder	
📁 cmd	04-04-2022 16:28	File folder	
📁 jdk	04-04-2022 16:28	File folder	
📁 ontime.ms.acs	04-04-2022 16:28	File folder	
📁 ontime.ms.auth	04-04-2022 16:28	File folder	
📁 otddbupdate	04-04-2022 16:28	File folder	
📁 outlook-add-in	04-04-2022 16:28	File folder	
📁 outlook-poll-add-in	04-04-2022 16:28	File folder	
📁 pollarity	04-04-2022 16:28	File folder	
📁 programdata	04-04-2022 16:28	File folder	
📁 scripts	04-04-2022 16:28	File folder	
📁 sqlserver	04-04-2022 16:28	File folder	
📁 teams	04-04-2022 16:28	File folder	
📁 teams_rail	04-04-2022 16:28	File folder	
📁 tomcat	04-04-2022 16:29	File folder	
📁 upgrade	04-04-2022 16:29	File folder	
📁 visitor	04-04-2022 16:29	File folder	
🔧 command.cmd	04-04-2022 12:12	Windows Comma...	1 KB
🔧 install.cmd	04-04-2022 12:12	Windows Comma...	1 KB
📄 installation.log	04-04-2022 12:51	Text Document	158 KB
📦 Office365TomcatRestart.zip	04-04-2022 12:12	Compressed (zipp...	12 KB
🔧 start-catering.cmd	04-04-2022 12:13	Windows Comma...	1 KB
🔧 start-pollarity.cmd	04-04-2022 12:13	Windows Comma...	1 KB
🔧 start-visitor.cmd	04-04-2022 12:13	Windows Comma...	1 KB
🔧 stop-catering.cmd	04-04-2022 12:13	Windows Comma...	1 KB
🔧 stop-pollarity.cmd	04-04-2022 12:13	Windows Comma...	1 KB
🔧 stop-visitor.cmd	04-04-2022 12:13	Windows Comma...	1 KB
🔧 uninstall.cmd	04-04-2022 12:13	Windows Comma...	1 KB

In the File Explorer – change the path to the **old!** version of OnTime, jump to the folder:

C:\Program Files\IntraVision\OnTimeMS-x.x

Run the command ‘**uninstall.cmd**’ as administrator.

Upgrade from OnTime before ver. 2.8

In case you are upgrading from a version of OnTime from before ver. 2.8 you must do the following steps before you proceed to **Upgrade from OnTime ver. 2.8** :

At the external SQL server - extract the new OnTimeMS-x.x.zip file to a temporary location, where x.x is the new version.

Move the OnTimeMS.x.x folder to ‘C:\Program Files\IntraVision\’ - the recommended path. The ‘x’s reflects the current version release.

Jump to the new version of OnTime files:

C:\Program Files\IntraVision\OnTimeMS-x.x\sqlserver

Where x.x is the new version.

Name	Date modified	Type	Size
migrations	08-07-2020 11:17	File folder	
backup_db.sql	08-07-2020 09:26	Microsoft SQL Ser...	1 KB
onetime_script_for_renaming_ontimems...	08-07-2020 09:26	Microsoft SQL Ser...	1 KB
ontimems.sql	08-07-2020 09:26	Microsoft SQL Ser...	344 KB
ontimems-create.sql	08-07-2020 09:26	Microsoft SQL Ser...	1 KB
ontimems-upgrade.sql	08-07-2020 09:26	Microsoft SQL Ser...	1 KB
ontimems-user.sql	08-07-2020 09:26	Microsoft SQL Ser...	1 KB
refresh_usnchagned_and_exdir_change_k...	08-07-2020 09:26	Microsoft SQL Ser...	1 KB
restore_db.sql	08-07-2020 09:26	Microsoft SQL Ser...	1 KB
set_syslogin.sql	08-07-2020 09:26	Microsoft SQL Ser...	1 KB
set-admin-group-as-dbo.sql	08-07-2020 09:26	Microsoft SQL Ser...	1 KB

1. Create a new OnTime database in your MS SQL Server
- the default database name in OnTime version 3.x is ‘**ontimems.25.8**’.

2. Create tables and schemas:

In C:\Program Files\IntraVision\OnTimeMS-x.x\sqlserver\
open the sql-script, 'ontimems.sql' in SQL Server Management Studio - or a
text editor – adapt the first line in the script, for example:

USE [ontimems.25.8] – Note, square brackets!

- this database reference must be the same as the database name from the
database you created.

Run the script 'ontimems.sql' to create tables and schemas

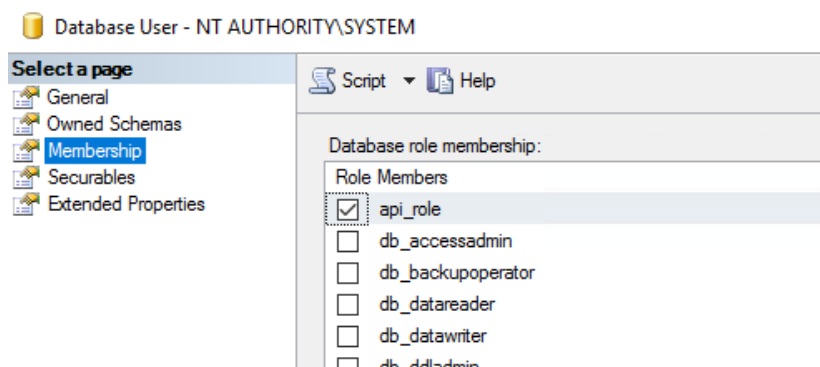
3. Add the OnTime database user in the OnTime database:

ontimems.25.8/Security/Users/

In case you use 'Integrated Security', the user is 'NT AUTHORITY\SYSTEM'.

In case you use a specific database user, an example is 'OnTimeApp'.

4. Change the OnTime database users properties for the 'api_role.'



5. Check your current database version by opening your OnTime database, the one you are upgrading.

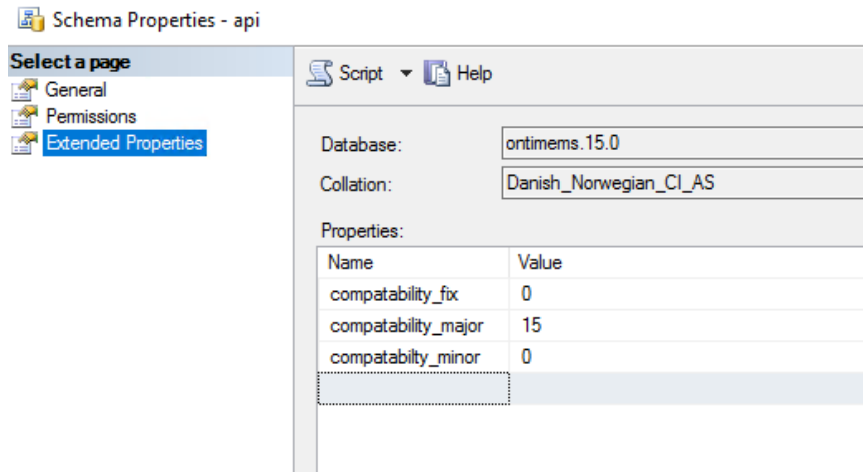
If you have used the default OnTime database name, this name reflects the
OnTime database version.

If you are unsure of the OnTime database version, you may check the
database's Extended properties of the 'api', at:

DatabaseName/Security/Schemas/api (Properties/Extended Properties).

Example:

Note the value of 'compatibility_major' and 'compatibility_minor'. These
numbers report the schema version of the database. In the illustration below,
we see the database version 15.0.



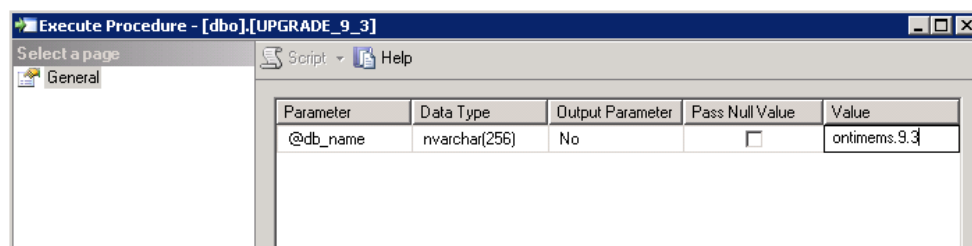
- Open the Stored procedures (below Programmability) in the new database. Several stored procedures are available for dbo.UPGRADE:

Example:

dbo.UPGRADE_9_3

Right-click the Stored Procedure relevant to your old database version and choose “Execute Stored Procedure”.

In the “Value” field, enter the name of the old database and click “OK” to execute the database upgrade procedure.



The result “Return Value” of ‘0’ (zero) means success.

- Now you have an OnTime database to use in

Upgrade from OnTime ver. 2.8 .

Upgrade from OnTime ver. 2.8

Rename the database from 'ontimems.25.8' to 'ontimems'.

Upgrade from OnTime ver. 3.0.x and later

1. Create a backup of your OnTime database
2. Use the Otdbupdate tool to upgrade the database.
3. Ensure that you have a directory C:\SqlServerBackups for running the 'Otdbupdate' database tool.

From the folder C:\Program Files\IntraVision\OnTimeMS-x.x. open a command window as Administrator.

Otdbupdate.cmd requires an environment variable for JAVA_HOME in your OnTime installation files.

Set the environment variable for JAVA_HOME by running the command:

```
set JAVA_HOME=C:\Program Files\IntraVision\OnTimeMS-x.x\jdk
```

Set the environment variable for Path by running the command:

```
set PATH=%JAVA_HOME%\bin;%PATH%
```

Navigate to C:\Program Files\IntraVision\OnTimeMS-x.x\otdbupdate

Run this command, if you are using integratedSecurity:

```
otdbupdate.cmd -skipDefaultCallbacks=true  
-url=jdbc:sqlserver://localhost:1433;databaseName=ontimems;  
integratedSecurity=true migrate
```

All in one line!

This command, if you are using a specific database user:

```
otdbupdate.cmd -skipDefaultCallbacks=true  
-url=jdbc:sqlserver://localhost:1433;databaseName=ontimems;  
-user=OnTimeApp -password=xxxx migrate
```

All in one line!

Reinstall OnTime services:

From the directory C:\Program Files\IntraVision\OnTimeMS-x.x\cmd run the following commands as Administrator:

```
> apache-tomcat-otd-install.cmd
```

If you use Windows authentication

```
> ontime.ms.auth-install.cmd
```

Pollarity

Update the Pollarity database using 'otdbupdate.cmd'

From the folder C:\Program Files\IntraVision\OnTimeMS-x.x. open a command prompt as administrator.

Otdbupdate.cmd requires an environment variable for JAVA_HOME in your OnTime installation files.

Set the environment variable for JAVA_HOME by running the command:

```
set JAVA_HOME=C:\Program Files\IntraVision\OnTimeMS-x.x\jdk
```

Navigate to C:\Program Files\IntraVision\OnTimeMS-x.x\pollarity\otdbupdate

Depending of your setup use 'integratedSecurity' or 'SQL server authentication':.

- **Run this command, if you prefer 'integratedSecurity' in your SQL server:**
otdbupdate.cmd -skipDefaultCallbacks=true ^
-url=jdbc:sqlserver://localhost:1433;databaseName=pollarity;^
integratedSecurity=true migrate
- **This command, if you prefer 'SQL Server authentication':**
otdbupdate.cmd -skipDefaultCallbacks=true ^
-url=jdbc:sqlserver://localhost:1433;databaseName=pollarity; ^
-user=OnTimeApp -password=xxxx migrate

These commands should be all in one line, but the ^ signs are line separators, so the text can be copy pasted as is, just modify the password.

Catering

Update the Catering database using 'otdbupdate.cmd'

From the folder C:\Program Files\IntraVision\OnTimeMS-x.x. open a command window as Administrator.

Otdbupdate.cmd requires an environment variable for JAVA_HOME in your OnTime installation files.

Set the environment variable for JAVA_HOME by running the command:

```
set JAVA_HOME=C:\Program Files\IntraVision\OnTimeMS-x.x\jdk
```

Set the environment variable for Path by running the command:

```
set PATH=%JAVA_HOME%\bin;%PATH%
```

Navigate to C:\Program Files\IntraVision\OnTimeMS-x.x\catering\otdbupdate

Depending of your setup use 'integratedSecurity' or 'SQL server authentication':.

- **Run this command, if you prefer 'integratedSecurity' in your SQL server:**

```
otdbupdate.cmd -skipDefaultCallbacks=true ^  
-url=jdbc:sqlserver://localhost:1433;databaseName=catering; ^  
integratedSecurity=true migrate
```

- **This command, if you prefer 'SQL Server authentication':**

```
otdbupdate.cmd -skipDefaultCallbacks=true ^  
-url=jdbc:sqlserver://localhost:1433;databaseName=catering; ^  
-user=OnTimeApp -password=xxxx migrate
```

These commands should be all in one line, but the ^ signs are line separators, so the text can be copy pasted as is, just modify the password.

Visitor

Update the Visitor database using 'otdbupdate.cmd'

From the folder C:\Program Files\IntraVision\OnTimeMS-x.x. open a command window as Administrator.

Otdbupdate.cmd requires an environment variable for JAVA_HOME in your OnTime installation files.

Set the environment variable for JAVA_HOME by running the command:

```
set JAVA_HOME=C:\Program Files\IntraVision\OnTimeMS-x.x\jdk
```

Set the environment variable for Path by running the command:

```
set PATH=%JAVA_HOME%\bin;%PATH%
```

Navigate to C:\Program Files\IntraVision\OnTimeMS-x.x\visitor\otdbupdate

Depending of your setup use 'integratedSecurity' or 'SQL server authentication':.

- **Run this command, if you prefer 'integratedSecurity' in your SQL server:**
otdbupdate.cmd -skipDefaultCallbacks=true ^
-url=jdbc:sqlserver://localhost:1433;databaseName=visitor;^
integratedSecurity=true migrate
- **This command, if you prefer 'SQL Server authentication':**
otdbupdate.cmd -skipDefaultCallbacks=true ^
-url=jdbc:sqlserver://localhost:1433;databaseName=visitor; ^
-user=OnTimeApp -password=xxxx migrate

These commands should be all in one line, but the ^ signs are line separators, so the text can be copy pasted as is, just modify the password.

OnTime Admin Center

Clear your browsers cache, and open the administration URL:

<http://ontime.example.com:8080/ontimegcms/admin>

Note: Please insert your relevant URL instead of 'ontime.example.com'.

Administrator: admin (beware of casing, no capitals)

Password: ***** (your password from the OnTime installation phase)

Reset of password, if it is lost:

In the folder C:\Program Files\IntraVision\OnTimeMS-x.x\cmd
- you will find the command 'change-tomcat-password.cmd'.
Run it as an administrator to reset the admin password.

Database Setup

Click 'Database'.

If '**Local SQL Server**', enter 'localhost' in the 'Server' field.

Tick 'Integrated Security'.

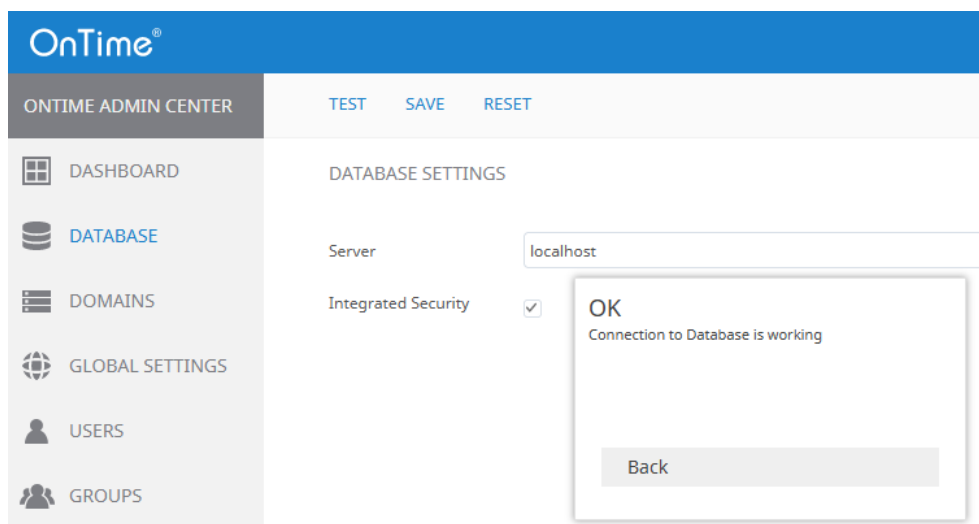
If '**External SQL Server**', enter the hostname of the external SQL server in the 'Server' field.

Tick 'Integrated Security'.

Click "Test" in the upper right corner to test the database connection.

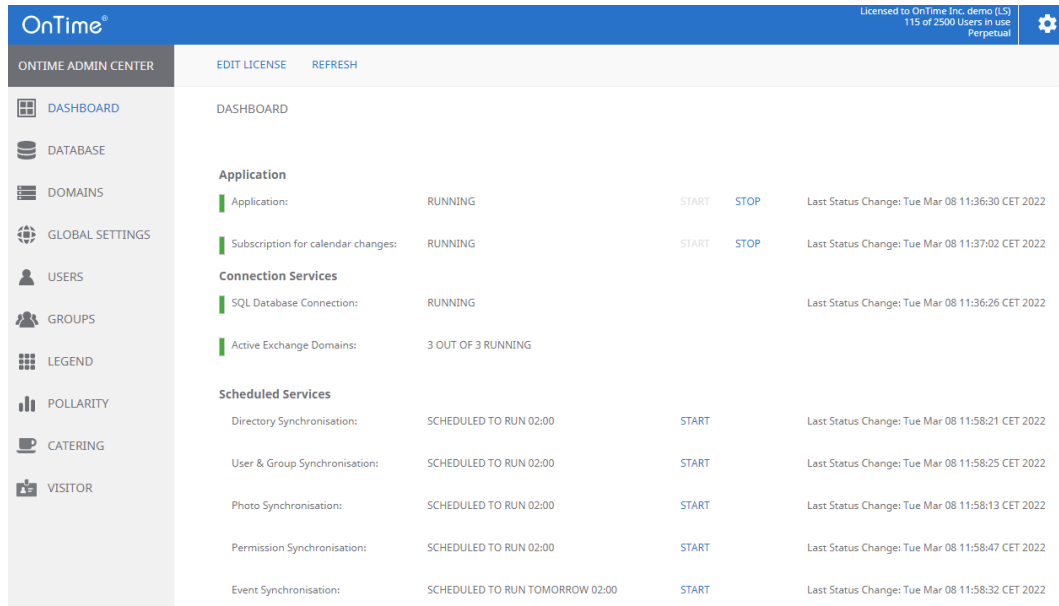
Upon the response "OK Connection to database is working" click "Back".

Click Save.



In “OnTime Admin Center”, click “Dashboard”.

Note: When you see the Connection/Database Service “Running” (green), press **F5** to refresh the whole web page from the new database.



The screenshot shows the OnTime Admin Center interface. The top navigation bar includes 'EDIT LICENSE' and 'REFRESH'. The left sidebar lists various menu items: DASHBOARD, DATABASE, DOMAINS, GLOBAL SETTINGS, USERS, GROUPS, LEGEND, POLLARITY, CATERING, and VISITOR. The main content area displays the 'DASHBOARD' with a table of service statuses:

Service Name	Status	Start	Stop	Last Status Change
Application				
Application:	RUNNING	START	STOP	Last Status Change: Tue Mar 08 11:36:30 CET 2022
Subscription for calendar changes:	RUNNING	START	STOP	Last Status Change: Tue Mar 08 11:37:02 CET 2022
Connection Services				
SQL Database Connection:	RUNNING			Last Status Change: Tue Mar 08 11:36:26 CET 2022
Active Exchange Domains:	3 OUT OF 3 RUNNING			
Scheduled Services				
Directory Synchronisation:	SCHEDULED TO RUN 02:00	START		Last Status Change: Tue Mar 08 11:58:21 CET 2022
User & Group Synchronisation:	SCHEDULED TO RUN 02:00	START		Last Status Change: Tue Mar 08 11:58:25 CET 2022
Photo Synchronisation:	SCHEDULED TO RUN 02:00	START		Last Status Change: Tue Mar 08 11:58:13 CET 2022
Permission Synchronisation:	SCHEDULED TO RUN 02:00	START		Last Status Change: Tue Mar 08 11:58:47 CET 2022
Event Synchronisation:	SCHEDULED TO RUN TOMORROW 02:00	START		Last Status Change: Tue Mar 08 11:58:32 CET 2022

SSL certificates for the OnTime Tomcat Server

To support secure communication, **https** with the OnTime clients, three certificate files are needed for the Tomcat server.

1. ontime-rsa-key.pem
2. ontime-rsa-cert.pem
3. ontime-rsa-chain.pem

The three files mentioned are in '.pem' format (base64 encoded). The first file contains the servers private key. The second file contains the servers ssl-certificate. The third file contains the signing chain certificates from the 'Root CA' and the 'Intermediate CA'

In the OnTime installation the three files are mentioned in the server.xml file, placed in: C:\Program Files\IntraVision\Ontime.x.x\tomcat\conf\

Depending on the system where you obtained the SSLcertificate you might get the SSL certificate as a .pfx or .p12 (pkcs12 format) file for the OnTime server.

Generate the OnTime .pem files from the certificate file:

Install the OpenSSL 'command line' tool

- may be downloaded from <https://sourceforge.net/projects/openssl/>

1. Retrieve the private key:

```
C:\OpenSSL-Win32\bin\temp>
..\openssl pkcs12 -nodes -nocerts -in certs.pfx -out private.pem
```

If you have not made an openssl.cfg file, you will see a warning, not important.
Enter Import Password: ***** (Enter)

A private password protected .pem file is generated with the private key.

2. Remove the password from the private.pem file:

```
C:\OpenSSL-Win32\bin\temp>
..\openssl rsa -in private.pem -out ontime-rsa-key.pem
```

The OnTime-rsa-key.pem file contains the private key without a password.

Example:

```
-----BEGIN RSA PRIVATE KEY-----
MIIEowIBAAKCAQEAI451sXhcxMMBUf96S5kS9ZHHLmMECAzkOJtTK14o3FnbMWMz
RlunTVL0VibOxdBraVfyEY2DbiBnwamHtBx6PEXVmk48AtohoMUWRajW6xQXZ/xa
7oGd6zwnkau9ns04AFXPKfLf2YfD/MbevtU6xhbXKWsJq6kAeQSMF6BbrumJSuTx
6XTZSnS+z2NL+FmFuwdjnjAlJRbTFgYSII1094K2pleY3XAz5HUBxK9QsvPmfi9I
D/NRmM4sdFYVUxqJxgUju6vY9XRqGids3KcpenQ4R++AJwn5yckIyQAp32ern5vn
HDVuqvYnxv0n4hEe9o2267RhS4NKkQHjds8/wIDAQABAoIBAH2650Xwj0OmvHXH
```

Retrieve the server's certificate:

```
C:\OpenSSL-Win32\bin\temp>
..\openssl pkcs12 -in certs.pfx -clcerts -nokeys -out ontime-rsa-cert.pem
```

Option:

Depending on the certificate supplier you may get this file as 'ssl_certificate.crt'.
Rename it to 'ontime-rsa-cert.pem'

Example:

```
-----BEGIN CERTIFICATE-----
MIIGLzCCBRegAwIBAgIQCEyplwG8D7vWyBkyjLso6DANBgkqhkiG9w0BAQsFADBe
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRG1naUN1cnQgSW5jMRkwFwYDVQQLExB3
d3cuZGlnaWN1cnQuY29tMR0wGwYDVQQDEXRSYXBPZmFNTTcBSU0EgQ0EgMjAxODAE
Fw0xOTA0MDEwMDAwMDBaFw0yMTAzMzExMjAwMDBaMBGxGjAUBG9NVBAMMDSoub250
aW11MDEuZGswggEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEKAoIBAQCCLjnWxeFze
```

3. Extract the certificate chain, in the command prompt:

```
C:\OpenSSL-Win32\bin\temp>  
..\openssl pkcs12 -nokeys -in certs.pfx -out ontime-rsa-chain.pem
```

An ontime-rsa-chain.pem file is generated with the certificate chain, Root CA and Intermediate CA, base64 encoded.

Option:

If you copy this file into a .crt extension - you may double-click/Open the file to check your 'Certification Path'.

4. The three OnTime .pem files are placed in the folder as referenced in the server.xml file:

```
C:\ProgramData\IntraVision\OnTimeGCMS\keys\
```


SSL certificates for the OnTime Auth Service

If SSL (https) communication is required for the OnTimeMS Auth service, you must install a certificate at the Windows server.

Acquire an SSL certificate pfx or p12 (pkcs12 format) file for the OnTime server.

1. Open a command prompt in administrator mode:
Run >certlm
- to open the Microsoft Certificates application for 'Local Computer'.

Right-click 'Personal', choose 'All Tasks\Import'.

Click 'Next'.

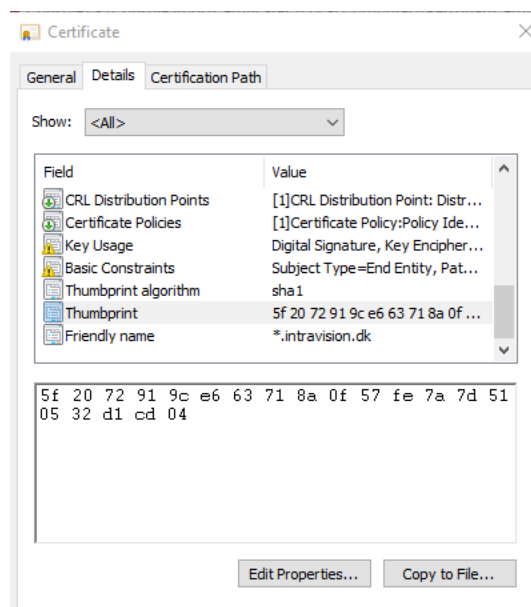
Browse for your SSL certificate file, searching in – Personal Information Exchange (*.pfx, *.p12) files – click 'Open' – click 'Next'.

Enter the password for your SSL certificate file, click 'Next' and click 'Finish'.

Upon the message 'The Import was successful' – click 'OK'.

Check the imported certificates – click 'Personal/Certificates' in the Certificates application.

2. Acquire the thumbprint of the certificate.
Expand 'Certificates' – 'Personal' – 'Certificates'.
Open the certificate for your server.
Choose details – and thumbprint.



Copy the thumbprint characters into a text editor fx. Notepad.

Remove the spaces in between the characters.

Copy the characters to the clipboard for use as 'certhash' in the next section.

3. Open a command prompt in administrator mode:

Run 'netsh' with parameters, substitute the value of 'certhash' with your own value. The 'appid' is just a dummy value (needed).

Note: Run the following three lines as one line in the command prompt:

```
netsh http add sslcert ipport=0.0.0.0:443  
certhash=5f2072919ce663718a0f57fe7a7d510532d1cd04  
appid={00112233-4455-6677-8899-AABBCCDDEEFF}
```

and also these three lines as one line in the command prompt::

```
netsh http add sslcert ipport=0.0.0.0:9443  
certhash=5f2072919ce663718a0f57fe7a7d510532d1cd04  
appid={00112233-4455-6677-8899-AABBCCDDEEFF}
```

The response text should show:

```
SSL Certificate successfully added
```

At this stage, you have enabled the SSL communication for all Windows web services that need it.

In case you want to change the certificate, run:

```
netsh http delete sslcert ipport=0.0.0.0:443
```

and

```
netsh http delete sslcert ipport=0.0.0.0:9443
```

- and rerun the 'netsh http add' command above with new parameters.

In case you want to show the certificate(s), run:

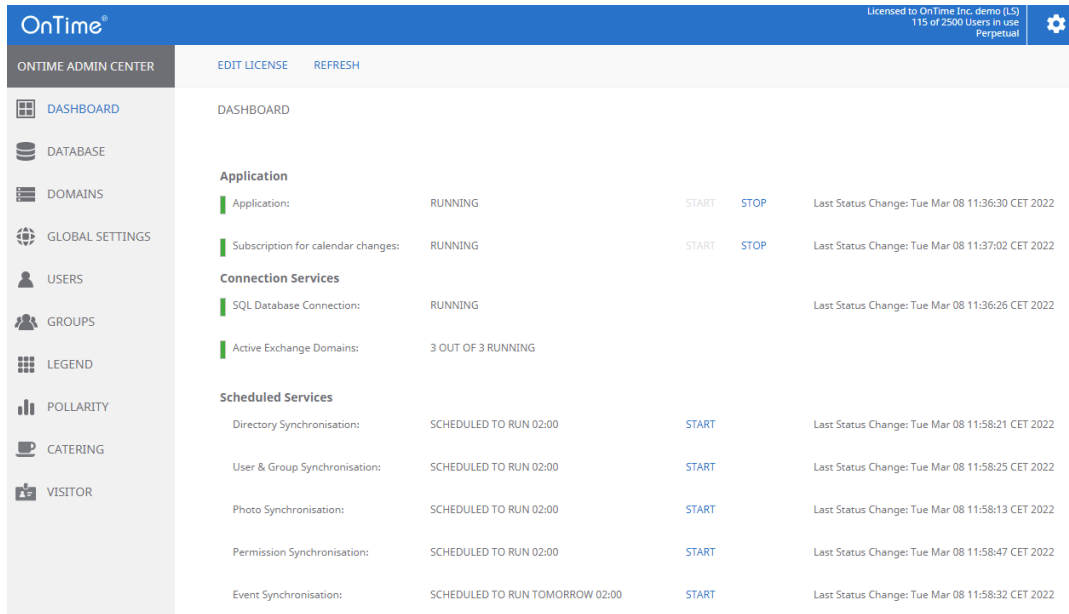
```
netsh http show sslcert ipport=0.0.0.0:443
```

and

```
netsh http show sslcert ipport=0.0.0.0:9443
```

Pick up the new version of OnTime

In “OnTime Admin Center” click “Dashboard”.



The screenshot shows the OnTime Admin Center interface. The top navigation bar includes 'EDIT LICENSE' and 'REFRESH'. The left sidebar lists various menu items: DASHBOARD, DATABASE, DOMAINS, GLOBAL SETTINGS, USERS, GROUPS, LEGEND, POLLARITY, CATERING, and VISITOR. The main content area displays the 'DASHBOARD' with several sections:

- Application:**
 - Application: RUNNING (START, STOP buttons) | Last Status Change: Tue Mar 08 11:36:30 CET 2022
 - Subscription for calendar changes: RUNNING (START, STOP buttons) | Last Status Change: Tue Mar 08 11:37:02 CET 2022
- Connection Services:**
 - SQL Database Connection: RUNNING | Last Status Change: Tue Mar 08 11:36:26 CET 2022
 - Active Exchange Domains: 3 OUT OF 3 RUNNING
- Scheduled Services:**
 - Directory Synchronisation: SCHEDULED TO RUN 02:00 (START button) | Last Status Change: Tue Mar 08 11:58:21 CET 2022
 - User & Group Synchronisation: SCHEDULED TO RUN 02:00 (START button) | Last Status Change: Tue Mar 08 11:58:25 CET 2022
 - Photo Synchronisation: SCHEDULED TO RUN 02:00 (START button) | Last Status Change: Tue Mar 08 11:58:13 CET 2022
 - Permission Synchronisation: SCHEDULED TO RUN 02:00 (START button) | Last Status Change: Tue Mar 08 11:58:47 CET 2022
 - Event Synchronisation: SCHEDULED TO RUN TOMORROW 02:00 (START button) | Last Status Change: Tue Mar 08 11:58:32 CET 2022

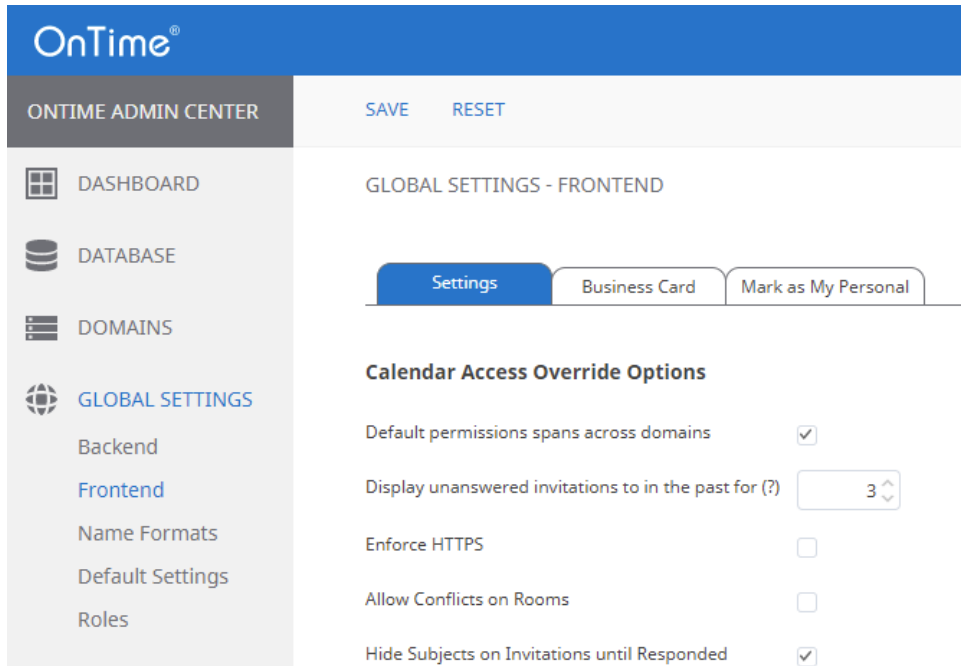
Click ‘Stop’ and then ‘Start’ at ‘Application Status’.

Click ‘Start’ at ‘Directory Sync’; this will, in turn, start ‘User & Group sync’.

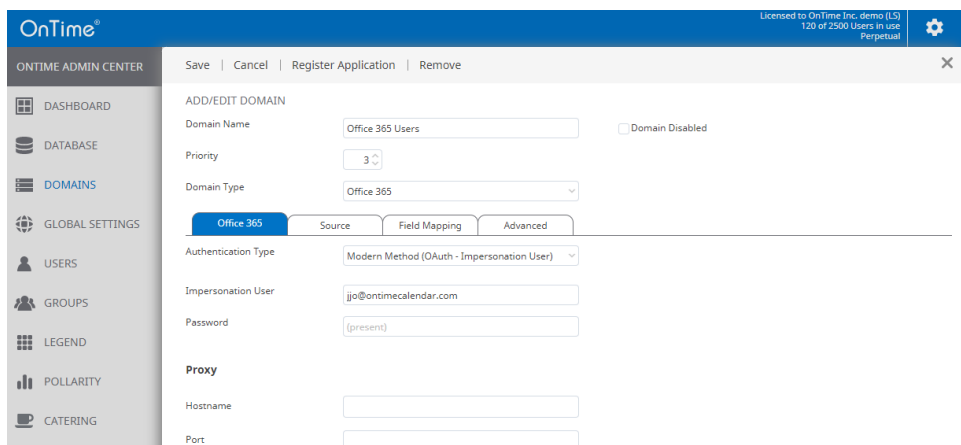
Click ‘Start’ at ‘Photo Sync’, ‘Permission Sync’ and ‘Event Sync’.

Domain considerations

If you upgrade from OnTime 2.8.x and 3.0 – and you use the option of multiple domains – please consider ticking the setting 'Default permissions spans across domains', in the section Global/Frontend, to let OnTime control the users default permissions across the domains, as below



From OnTime ver. 5.3, the Domain section has changed.



Office 365 configuration, Authentication

We suggest that you change your way of authentication to 'OAuth' – since 'Basic Authentication' is deprecated by Microsoft.

We now have two choices of OAuth authentication.

- Modern Method (OAuth – Impersonation User)
- Modern Method (OAuth – Client Credentials)

OnTime 'Impersonation User' does not support multifactor authentication – as an alternative choose 'Client Credentials' for authentication.
For details see the 'OnTime Installation & Configuration' guide.

The three values, for Application (client) ID, Directory (tenant) ID, Client Secret Value - are obtained from Microsoft Azure Portal, look below.

Missing permissions in the Azure configuration, will be listed. If some permissions are missing you should check your configuration in Microsoft Azure Portal.

Registering OnTime in Azure

The Oauth registering of the OnTime application in Azure is relevant for
Modern Method (Oauth – Client Credentials)
- and
Modern Method (Oauth – Impersonation User)

Note: We suggest Notepad as a media in-between for copying values to OnTime.

- a) Login to <https://portal.azure.com>
- b) Click view 'Manage Azure Active Directory'
- c) Click 'App registrations'.
- d) Click 'New registration'.
- e) Enter a 'Name' for the application.
Choose 'Accounts in this organizational directory only - Single tenant'.
Populate 'Redirect URI', insert <http://localhost:8080/ontimegcms/code.html>
- this field cannot be empty.
Select a Platform 'Web'
Click 'Register'.
- f) On next page (Overview) Copy the values [Application (client) ID] and [Directory (tenant) ID] into a text editor e.g. Notepad.
- g) Click 'Add a certificate or secret'
- h) Click '+ New client secret'
- i) Add a description, such as 'OnTime Client Secret'
- j) Choose expiration. Click Add
- k) Copy the value of the secret ID into the text editor.
- l) Click 'Authentication' tab. Tick 'Access Tokens'. Click 'Save'.
- m) Copy the three values from Azure in the text editor into the page 'OnTime Admin Center' –
'Domains Add/Edit Domain/Authentication'.
- n) Click 'API permissions' tab. Click 'Add a permission'.

- o) Click 'Microsoft Graph'
- p) Click 'Application permissions'
- q) The following API permissions have to be ticked, type a few letters in the Search field and tick the five permissions:
Calendars.ReadWrite, Directory.Read.All,
MailboxSettings.ReadWrite, People.Read.All, Place.Read.All,
User.Read.All

You may remove 'User.Read', if already selected.

- r) Click 'Add a permission'.
- s) Click 'Microsoft Graph'
- t) Click 'Delegated permissions'
- u) Search for EWS, tick:
EWS.AccessAsUser.All
- v) Click 'Add a permission'
- w) Click 'APIs my organization uses'
- x) In the field for search, enter 'Office'
- y) Click 'Office 365 Exchange Online'
- z) Click 'Application permissions'
- aa) Tick 'full-access_as_app'
- bb) Click 'Add permissions'
- cc) Click 'Grant admin consent for "your company"
Click 'Yes' to answer the question ' Do you want to grant consent ...'
- dd) All done ;-)

Description of OnTime functionality by Azure permissions

Calendars.ReadWrite - get Online Meeting event, build Online Meeting event or add to existing event.

Directory.Read.All - used for get members for MS Teams group, get Office Location for room, get and validate current application permissions.

MailboxSettings.ReadWrite - used for automaticRepliesSetting and make it possible to get and update AutoReply for mailboxes.

User.Read.All - translate event Ids between MS Graph and MS Outlook API's.

Place.Read.All - get room extended information like capacity.

People.Read.All – used for Advanced Search.

EWS.AccessAsUser.All - Delegated permissions used for OAuth authentication functionality

Teams considerations

Config.html

If your OnTime server is configured for MS Teams you should make a change to the file config.html in the folder:

C:\Program Files\Intravision\OnTimeMS-x.x\tomcat\webapps\teams

Open the file with a text editor and change the URL from
/ontimegcms/desktop to /ontimegcms/teams

Roll back

In case you want to roll back your OnTime to a previous version, it is possible through a restore of the old database(s) and a reinstallation of OnTime from your old version directory.

Step 1:

Run, as administrator, 'uninstall.cmd' from the new OnTime version directory

Step 2:

When you installed the new version of OnTime, backup database files were made. The files by default are placed in C:\SqlServerBackups. The main OnTime database has a filename, OnTime(Year-Month-Date-Time).Bak.

OnTime add-on products are shown as databases for Pollarity, Catering, Visitor.

The restore of the old database(s) may be made with 'SQL Server Management Studio (SSMS)'.

Step 3:

In your old OnTime version directory, change to the directory:

C:\Program Files\IntraVision\OnTimeMS-x.x\cmd:

Run, as administrator, 'install-ontime-services-only.cmd'

Step 4.

For the OnTime add-on produkts you must run the appropriate 'start'-commands.

In your old OnTime version directory, change to the directory:

C:\Program Files\IntraVision\OnTimeMS-x.x\:

Run, as administrator, 'start-catering.cmd'

Run, as administrator, 'start-pollarity.cmd'

Run, as administrator, 'start-visitor.cmd'

Step 5.

Just in case ...

Versions before OnTime 3.7 has a service 'OnTimeMS URL Forwarder' and the port referenced should be 443 – and not 9443.

Clear your browsers cache and open the administration URL:

<http://ontime.example.com:8080/ontimegcms/admin>

Note: Please insert your relevant URL instead of 'ontime.example.com'.

If you restore OnTime to a version before 3.7, you must check the configuration in the 'OnTime Admin Center' Global/Backend/Authentication:

Authentication

Authentication service method

Custom

Custom

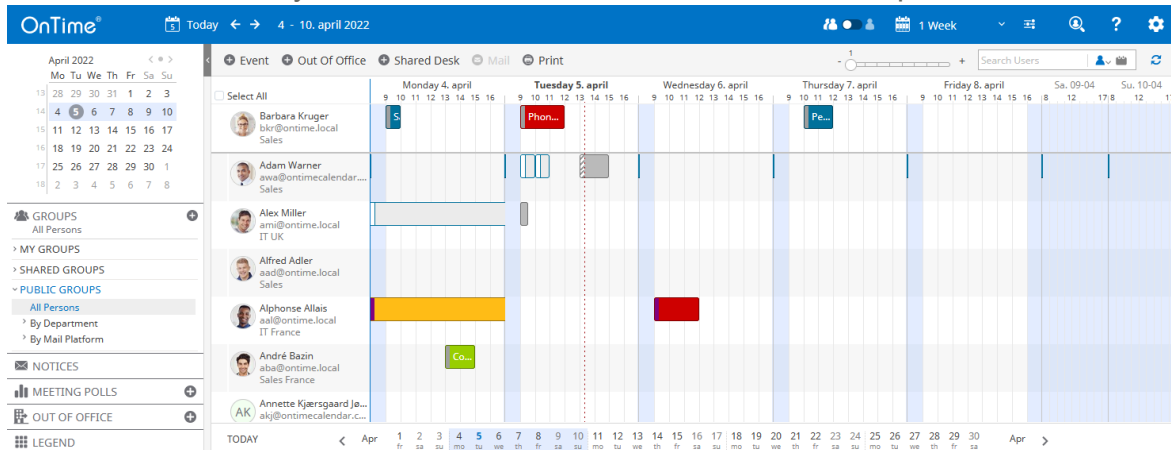
http://9443/ontime/auth.html

Final test

OnTime Client Web Desktop

<http://ontime.example.com/ontimegcms/desktop>

Note: Please insert your relevant URL instead of 'ontime.example.com'.



OnTime Client Web Mobile

<http://ontime.example.com/ontimegcms/mobile>

Note: Please insert your relevant URL instead of 'ontime.example.com'.

